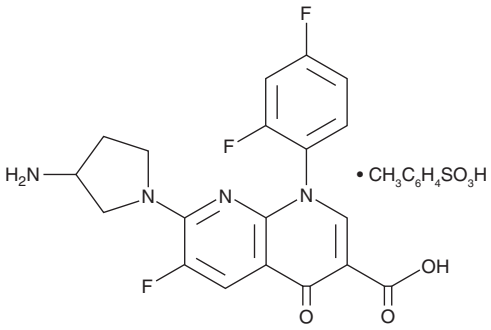
PRODUCT INFORMATION

Tosufloxacin (tosylate)

Item No. 21427

CAS Registry No.: 115964-29-9
Formal Name: 7-(3-amino-1-pyrrolidinyl)-1-(2,4-difluorophenyl)-6-fluoro-1,4-dihydro-4-oxo-1,8-naphthyridine-3-carboxylic acid 4-methylbenzenesulfonate
MF: $C_{19}H_{15}F_3N_4O_3 \bullet C_7H_8O_3S$
FW: 576.5
Purity: ≥95%
UV/Vis.: λ_{max}: 221, 269, 341 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Tosufloxacin (tosylate) is supplied as a crystalline solid. A stock solution may be made by dissolving the tosufloxacin (tosylate) in the solvent of choice, which should be purged with an inert gas. Tosufloxacin (tosylate) is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of tosufloxacin (tosylate) in these solvents is approximately 30 mg/ml. Tosufloxacin (tosylate) is slightly soluble in ethanol.

Tosufloxacin (tosylate) is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, tosufloxacin (tosylate) should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Tosufloxacin (tosylate) has a solubility of approximately 0.33 mg/ml in a 1:2 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Tosufloxacin is a fluoroquinolone antibiotic. It has activity against diverse aerobic and anaerobic bacteria *in vitro*.[1,2] Tosufloxacin is also effective against bacterial persisters, showing significant activity against *S. aureus* and uropathogenic *E. coli* persisters.[3,4] As with many other quinolones, tosufloxacin use can be associated with significant side effects.[5]

References

1. Espinoza, A.M., Chin, N.-X., Novelli, A., *et al.* Comparative in vitro activity of a new fluorinated 4-quinolone, T-3262 (A-60969). *Antimicrob. Agents Chemother.* **32(5)**, 663-670 (1988).
2. Fernandes, P.B., Chu, D.T.W., Swanson, R.N., *et al.* A-61827 (A-60969), a new fluoronaphthyridine with activity against both aerobic and anaerobic bacteria. *Antimicrob. Agents Chemother.* **32(1)**, 27-32, (1988).
3. Niu, H.Y., Cui, P., Yee, R., *et al.* A clinical drug library screen identifies tosufloxacin as being highly active against *Staphylococcus aureus* persisters. *Antibiotics (Basel)* **4(3)**, 329-336 (2015).
4. Niu, H.Y., Cui, P., Shi, W., *et al.* Identification of Anti-Persister Activity against Uropathogenic *Escherichia coli* from a Clinical Drug Library. *Antibiotics (Basel)* **4(2)**, 179-187 (2015).
5. Rubinstein, E. History of quinolones and their side effects. *Chemotherapy* **47(Suppl. 3)**, 44-48 (2001).

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